## Montana DEQ Forest Fire Smoke Advisory July 18 2007 10:00 AM Wednesday July 18

## **Current Situation**

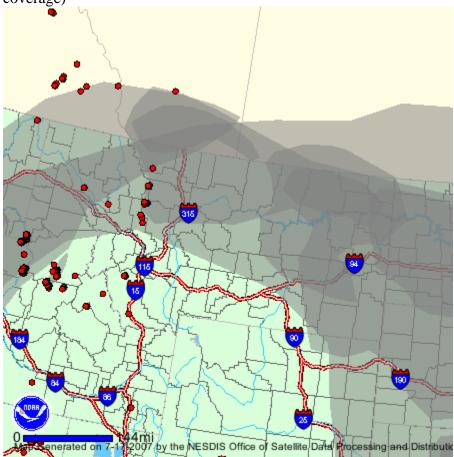
There is still a lot of smoke visible aloft over western Montana on this morning's Satellite photo but the sky is clearer many areas than it was yesterday thanks to widespread thunderstorms that are still working there way out of the state at this time. Southerly flow aloft has continued to push smoke from fires in Idaho and Oregon into western Montana and MODERATE smoke levels are still present in Libby, Whitefish, and Kalispell. These areas should see improved conditions later this morning as the mixing height rises. Hot dry winds from the south will start this afternoon and continue through Thursday, this will continue to push smoke into western Montana and may increase fire activity levels enough to transport smoke into other areas. See the forecast below for details. Smoke conditions near the active fires in Montana are expected to be UNHEALTHY or worse. Residents near active fires or experiencing noticeable smoke levels should use the VISIBILITY GUIDELINES to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:

G-11 IMG 18 JUL 07 TIME-13:00UTC RES-01.00KM NUSZUR-SSD

20002 G-11 IMG 1 18 JUL 07199 130000 03277 17488 01.00

This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage)



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg\_fire2.php

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

http://www.deq.state.mt.us/FireUpdates/SmokeCategories.asp

## Updated 10 AM July 18, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	
UNHEALTHY FOR SENSITIVE GROUPS	
MODERATE	Libby T24 Whitefish T8 Kalispell T8

T1(x) One-hour TEOM or BAM value (number of values)

T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value

Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local visibility guidelines

http://www.deq.state.mt.us/FireUpdates/VisibilityRanges.asp

to evaluate possible health risks and make informed activity decisions.

## **Forecast**

Southerly winds aloft and at the surface will continue to push smoke into western Montana today. Smoke from the Pattengail Creek fire northeast of Wisdom could impact the Anaconda-Butte-Helena area later this afternoon and evening if the fire there takes off this afternoon. Smoke from the fires in the Bob Marshall Wilderness could impact communities along the Front Range from Choteau to Browning. Dispersion this afternoon should be excellent with high mixing heights and moderate to strong winds. This will improve conditions at the surface in those areas currently seeing MODERATE levels of residual smoke but may mix some of the smoke aloft down to other areas for some temporary impacts there. Areas downwind of active fires could see significant impacts if fire levels increase dramatically. With the excellent mixing the plumes will mix down to the surface miles downwind of the fires. Residents near active fires need to remain aware of current conditions and use the visibility guidelines:

http://www.deq.state.mt.us/FireUpdates/VisibilityRanges.asp

to guide their activity decisions as the situation changes.

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